The Employment Regimes of Industrial Districts: Promises, Myths, and Realities

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The industrial district model views socially and regionally integrated economic relations as the basis for competitive and viable regional economies. The "socially embedded" organization of production in industrial districts is said to have emancipatory effects for labor and regional economies. This paper challenges this view. Recent developments of inter-firm relations in industrial districts in the "Third Italy" and Baden-Württemberg, the "model cases" in the district literature, reveal a number of tensions and contradictions, with precarious outcomes for labor and employment. Contradictions between local needs and global forces, business flexibility and employment security, risk sharing and risk shifting, and business efficiency and employment equity raise doubts about industrial districts as a model for "labor friendly" regional economic development.

Das Modell des industriellen Distrikt betrachtet die soziale Integration wirtschaftlicher Beziehungen in die regionale Gemeinschaft als Basis für die Wettbewerbs- und Überlebensfähigkeit des Distrikts als Produktionsorganisation. Aus dieser "sozialen Einbettung" werden gewöhnlich emanzipatorische Auswirkungen für Arbeiternehmer und Regionalwirtschaft abgeleitet. Der vorliegende Aufsatz widerspricht dieser These. Neuere Entwicklungen in industriellen Distrikts im "Dritten Italien" und Baden-Württemberg, den "Modellfällen" der Distriktliteratur, deuten auf Spannungen und Widersprüche. Widersprüche zwischen lokalen Bedürfnissen und globalen Kräften, betriebliche Flexibilität und Beschäftigungssicherheit, Risikoteilung und Risikoverlagerung, und betriebliche Effizienz und Arbeitsgerechtigkeit lassen Zweifel am industriellen Distrikt als Modell für eine "arbeitnehmerfreundliche" Regionalentwicklung angebracht erscheinen.

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1. Introduction

The prolonged economic crisis that began in the advanced industrialized countries in the late 1970s has generated growing interest in network-based systems of production and exchange. Business firms have experimented with non-bureaucratic forms of production involving flexible work practices and cooperative - as opposed to competitive - external relations with competitors, suppliers, and customers. Labor unions have struggled with new approaches to employment protection that fit the conditions of flexible business networks. Also public policy makers have shown interest in flexible business networks, considering them a possible tool for economic renewal. Some observers see in recent economic restructuring efforts the emergence of a "new competition" (Best 1990), driven by small and entrepreneurial firms, dynamic business networks and alliances, and organizational innovations based on computerization and high technology.

Underlying many of these developments is the idea of "flexible specialization", postulating the end of mass production and the tendency toward industrial de-concentration. In situations where market competition is based on technology and product quality, product cycles are very short, and development costs are high, firms need to be particularly flexible to respond to unpredictable changes in the marketplace (Schoenberger 1988). Network-based production and exchange systems are seen as one way to achieve flexibility, where firms undertake core aspects of production in-house and outsource peripheral activities to specialist firms. The network as a whole is thought to be flexible to the extent that each task can be organized with a different mix of specialized producers.

In this paper, we focus on business networks that are bounded geographically and are embedded in regional social structures, traditions, and political institutions. Such spatial networks are often referred to as regional clusters or "industrial districts." The literature on districts usually refers to specific regions in Northern and Central Italy, known as the "Third Italy" (Brusco 1982; Piore and Sabel 1984; Ricoveri et al. 1991) and the state of Baden-Württemberg in Southwest Germany (Sabel et al. 1989; Herrigel 1993), but recent discussions have included districts in Lower Austria (Grabher 1989), Jutland in Denmark (Hansen 1991), Quebec in Canada (Julien 1992), high-tech regions such as Silicon Valley in the U.S. and Cambridge, England (Saxenian 1989), and a variety of regional production clusters such as the film-making complex in Los Angeles (Storper and Christopherson 1987) and the aerospace sector in Southern California (Scott and Mattingly 1989). By definition, what sets industrial districts apart from other territorially based production clusters is their embeddedness in a particular social infrastructure that supports cooperation and trust among all economic actors and thus provides for mutual adjustment to changing circumstances.

Our objective in this paper is to reflect critically on the concept of industrial district as a tool for economic development and renewal by examining tensions and contradictions with respect to outcomes for labor and employment. The strategic potential of industrial districts has had broad appeal ever since Piore and Sabel (1984) presented Italian small firm industrial districts as a new and desirable form of

production. Following early characterizations, discussions of industrial districts as a model for flexible specialization and endogenous regional economic development have often proceeded on an ideal-typical level. This is most evident, for example, in public policy attempts to replicate empirical experiences and relationships that are thought to possess model character (such as those in the "Third Italy"), without first exploring the particular circumstances that have shaped the evolution of structural arrangements in specific places. There is a danger that difficult concepts such as flexible specialization and industrial district are assuming a taken-for-granted reality without sufficient critical assessment. Especially in the area of business strategy and organization theory, only limited attention has been paid to the possibility that flexible networks in industrial districts have precarious outcomes for labor and employment relations, such as a weakening of labor power and a growing social and economic polarization of labor markets (for a critical analysis of oversights, see Harrison 1994). Instead, many researchers have preferred to comment on the benefits of organizational relationships, proposing that flexible networks permit firms to blend capabilities, share risks, and generate options, inter alia. Employment and labor market questions have generally not figured very prominently, except indirectly via the assumption that the economic success of industrial districts (measured in terms of export ratios or output growth) implies high levels of employment. Only in this way can there be some comfort in the observation that flexible small firm networks may "not lead to a 'quality culture' among producers ... [but have] helped to sustain local employment" (Bigarelli and Crestanello 1994, p. 141).

There is a clear need to avoid theoretical over-simplifications in an attempt to make sense of complex empirical developments, lest explanations of district performance turn into myths and half-truths. In this paper, we draw attention to a number of tensions and contradictions in the employment regimes of industrial districts. To inform our analysis of these problem areas, we first outline the ideal-typical characteristics of industrial districts that have generated so much interest in recent years. We conclude the paper with a brief discussion of the limitations of the district model for economic development policy.

2. Hopes and Promises of Industrial Districts

Industrial district is a term coined by Alfred Marshall (1890/1961), who described the external economies of scale that derive from the concentration of specialized firms and industries in particular locales. While he identified various economic relationships between long run production costs and access to specialized pools of land, labor, capital, energy, transportation, and so on, he also pointed to the role of an "industrial atmosphere". As a qualitative and sociological concept, the significance of an "industrial atmosphere" is that the full achievement of quantitative economies depends on the existence of a stable social infrastructure as the basis for consensus, cooperation, and "thick trust" among all actors in the network of interfirm relations. This infrastructure may include family and kinship-based connections as well as ties with network-relevant political-institutional actors, embedded in the

district's political tradition and social history. The presence of strong social bonds and historically sedimented relations among producers and other economic actors distinguishes industrial districts from other production agglomerations.

Following Marshall (1890/1961), industrial districts are commonly defined as regionally agglomerated production systems in which autonomous firms, each specializing in particular tasks, are linked institutionally.[1] Their success, from a district perspective, is based not necessarily on a particular product mix, rate of technological innovation, or firm size (as in conventional economic theory and business strategy), but derives from the cooperative organization of exchange relations among all actors in the district. These actors include not only the producers themselves, linked horizontally and vertically, but also service providers such as research institutes, funding agencies, consultants, labor unions, and development agencies. The district brings together organizations that, in the aggregate, constitute a recognized area of institutional life (DiMaggio and Powell 1983, p. 148). Given the high degree of cooperative interdependence, the fate of the individual firm is tied to the performance of the district as a whole, and thus firms have a vested interest in local development and stable network ties.

Interfirm cooperation in industrial districts means that network relations are neither solely hierarchical (as in Fordist-type arrangements) nor purely market driven (as among atomistic competitors), but they contain elements of both. Reliability and stability derives from the actors' embeddedness in a social infrastructure that fosters trust as a basis for social compromise in times of change. Market-like flexibility is obtained from the fact that production is decentralized among specialized firms which can easily respond to shifting demand, because they do not need to maintain large inventories. From a district perspective, geographic proximity matters not so much because of the information or transportation economies it entails, but because it facilitates trust-building and cooperative learning through face-to-face interaction. The strategic significance of such networks lies in a learning process that helps firms discover their mutual dependencies on others with complementary specialized competencies (Hamel 1991).

The current interest in business networking and industrial districts goes beyond the confines of business strategy theorizing, and is motivated by a variety of empirical observations and developments. One widely cited development since the 1970s is the resurgence of small business and self-employment (Bögenhold and Staber 1991). Its alleged high rate of innovativeness, job creation, and flexibility have made the small business sector an attractive economic development tool. Trends in the large corporate sector toward vertical disintegration as well as innovations in production technology and organizational control that reduce the importance of scale economies are thought to provide opportunities for small establishments to prosper in volatile and specialized markets. Since small firms are, by definition, the backbone of

[1] Our analysis excludes cooperatives, as the theory of industrial districts refers mainly to relations among private sector and profit oriented enterprises.

industrial districts, small-scale production and industrial districts complement each other in that districts rise and fall with the vitality of the small firm networks on which they are based.

A second source of attraction of the industrial district model is that it conjures up images of responsible labor-management cooperation, as well as opportunities for labor re-skilling, multi-skilling, and autonomy (Piore and Sabel 1984). Sabel (1982), for example, refers to possibilities of returning to a kind of craft worker. This worker is thought to be comfortable with a regime that requires "collaboration between different kinds of workers and across levels of official skill hierarchy" (Sabel 1982, p. 224), leading to a blurring of the boundary between intellectual and manual work. The standard argument is that flexible specialization in network-based production systems is unworkable without the full cooperation of employees and labor unions. Accordingly, flexible specialization in production networks is thought to lead to a recomposition of social relations benefitting both capital and labor.

The current popularity of the industrial district concept is also in keeping with the rediscovery of regional and local economies as a possible source of economic self-sufficiency, independence, and social cohesion (Sabel 1989). To Alfred Marshall (1890/1961), the appropriate unit of economic activity was a territorial area, not a firm. Regional economies, he noted, were specialized around particular product lines (e.g., Solingen and Sheffield cutlery, Reutlingen and Prato textiles, Birmingham guns), and their flexibility depended in large part on extensive cooperative relations among all producers and associations in the district. Over time, powerful forces led to the development of Fordist mass production regimes and national governmental structures, subordinating regionally integrated economic activity. Recent developments in world markets, however, so the argument runs, have created conditions under which regional economies can outcompete national regimes. Heightened market uncertainty, shorter product life cycles, and greater consumer sovereignty are said to have altered the industrial organization of economic activity: the size distribution of firms, the degree of horizontal and vertical integration, the structure of input and output markets, and so on (Piore and Sabel 1984). As large corporations decentralize, they create the conditions for the "reconsolidation of the region as an integrated unit of production" (Sabel 1989, p. 18), where locational proximity confers important external economies of scale and scope. At the institutional level, strengthened regional governance structures can pursue their own development paths, so the argument goes, and thus free themselves from their dependence on global developments.

Thus, there are several reasons why the industrial district model has enjoyed growing appeal in recent years. As locally integrated production and distribution systems, industrial districts support interfirm cooperation, benefitting firms, workers, and the regional economy as a whole. The general claim is that the particular social and economic organization of industrial districts leads to economies of scale and scope, innovativeness, and endogenously controlled industrial dynamism, and encourages the development and employment of highly skilled employees in "high-

technology cottage industries" (Sabel 1982). Hence its appeal to developmental economists interested in building regional territorial integrity and expanding locational options, as well as labor relations theorists looking for opportunities of "responsible autonomy" and self-control at the workplace.

To be sure, this is an ideal-typical depiction of an articulated industrial system, but its model character is often lost in efforts to fit empirical observations to theoretical preconceptions. In particular, the more policy oriented discussions of industrial districts have on occasions raised this concept to the level of a fetish, torn it out of its historical and spatial contexts, and obscured the empirical realities of districts as a "new regime of employment relations." But even some of the more academic discussions of the subject suggest teleological reasoning, selective interpretation of particular cases, and a tendency toward vulgar functionalism. An analysis of employment regimes in industrial districts reveals a number of tensions and contradictions that are often ignored in the current policy "push" toward districts as a model of endogenous regional development.

3. The Other Side of Flexible Networks and Industrial Districts

The limited success of industrial districts in some regions is often touted as a panacea for many of the problems associated with economic restructuring. However, there are several tensions and contradictions that limit the use of the district model for regional economic development, particularly if the intention is to generate the kinds of positive labor outcomes that Piore and Sabel (1984) and many of their followers have in mind. We examine four problem areas: contradictions between (1) regionalism and global forces; (2) corporate flexibility and employment security; (3) risk sharing and risk shifting; and (4) efficiency and equity.

Our analysis focuses on empirical realities in the "Third Italy" and Baden-Württemberg, as the regions that have received the most attention in the recent district literature. In the absence of comparative data sets, using identical variables and sampling criteria, we base our assessment of employment regimes on the available secondary literature. Much of the material that is useful for our purposes comes from papers published in small business and regional economics journals, but we also rely on anecdotal evidence found in the business press and trade journals.

3.1 Regionalism versus Globalism

Technology and organization are two key features of industrial change. In the last few decades, both have seen significant transformations in scope and breadth. Technological changes have become rapid and their diffusions swift, organizational forms have been changing, and the global division of labor has been altered. The 1980s saw a dramatic increase in the number and value of mergers and acquisitions in the U.S. and Western Europe, as well as a proliferation of strategic alliances and joint

ventures. More importantly for our analysis, a growing number of mergers, acquisitions, and alliances are across regional and national borders, reflecting the internationalization of interfirm cooperation and the evolution of many firms into "global enterprise networks" (Perlmutter 1992). Products such as Apple computers and Boeing airplanes have become global products as "no one nation or firm is responsible for designing, manufacturing, and marketing these products in their entirety" (Simon 1993, p. 53).

The globalization of production is in stark contrast to the premise of the local or regional boundedness of industrial districts. Industrial districts, as a model for endogenous local development, are aimed at strengthening local competencies and integrating the various stages in the chain of production within the region (Sengenberger 1993). But this image does not fit well the reality of many districts. Rather than enhancing ties to local firms and shoring up the local infrastructure for innovation, globally active firms are seeking competitive advantages wherever they can find them. Not only are district firms looking for outward investment opportunities, but districts themselves are being transformed by the inward investment of firms headquartered elsewhere, as in the case of the high-tech sector in Silicon Valley (Teece 1992) and Cambridge (Crang and Martin 1991). The Italian districts, too, are undergoing changes, as firms are increasingly substituting external linkages for local ones (Amin 1989).

We suspect the economic success of Baden-Württemberg since the 1960s has been partly attributable to the dynamics and innovativeness of small and medium sized enterprises and partly to the existence of such large and global firms as Daimler-Benz, Porsche, IBM, and Bosch. Many smaller firms in the industrial districts of Baden-Württemberg are suppliers to these large firms (Cooke and Morgan 1993). While this arrangement may benefit small firms in economically good times, their survival under the umbrella of large corporations is generally precarious during economic downturns, when large firms attempt to assert hierarchical control over smaller subcontractors in their network.

Technical innovation is necessary for the survival of businesses in today's technology-dominated global marketplace. However, small firms are generally not able to compete with larger firms in this respect and thus depend on their participation in interfirm networks as a source of knowledge and other inputs. This is particularly true in Italian districts where small firms predominate, but even there collaborative structures are often not sufficient to help firms overcome chronic funding problems (The Economist 1994). The district model asserts that interfirm networks are internal to the regional district, but it is more likely that, in a global economy, they tend to expand beyond district boundaries, depending on the source and availability of technological knowledge. Also, to the extent that technological innovation within districts is confined to a small number of firms, the possibility arises that some of them evolve into larger, 'elite' firms, and eventually become a target for takeover by multinational corporations, including those headquartered elsewhere. This has already happened in the engineering industries of Emilia-

Romagna to some degree (Murray 1987; Amin and Robins 1990). Along with this development may come the growing concentration of ownership, vertical integration of functions, and a new spatial international division of labor where firms in the districts function as dependent nodes in the global production networks of international corporations, and where districts themselves become nodes of larger, global webs. The idealized production structure of Italian districts may thus become overshadowed by the investment strategies and outsourcing activities of global players (Amin and Robins 1990). Evidence suggests that this is happening in other districts as well. For example, Christopherson and Redfield's (1993) study of the "ceramics corridor" in New York State showed that small firms in this district have been functioning in the shadow of Corning, the by far largest and dominant firm in the region, which has absorbed most of the benefits of publicly provided producer services aimed at building technical know-how.

In Baden-Württemberg, many of the larger corporations have begun to look for more outsourcing opportunities outside the region in which they are supposedly embedded. Daimler-Benz, for example, is planning a significant reduction of direct suppliers in its motor vehicle division, while lowering its in-house production from 45 percent to under 40 percent and raising the proportion of foreign outsourcing from 15 percent to 25 percent. Bosch is shifting more of its production of electric tools abroad, in particular to low-wage countries, to increase its foreign share of production above the already high level of 63 percent (Handelsblatt, 4.2.1994). Porsche is planning to reduce the number of its suppliers from over 900 in 1993 to about 300 by 1997 and to rely more on outsourcing to foreign firms (Handelsblatt, 22.3.1994). A recent survey of businesses in a variety of industries in the Bodensee region of Baden-Württemberg indicated that international sourcing is a growing and general phenomenon (Hahn and Gaiser 1994). Business strategies, according to this study, are driven mostly by competitive pressures. In those instances where interfirm relations are cooperative they are rarely limited to the region and often go beyond even national boundaries. For example, in the knitwear district in the Zolleralb region in Baden-Württemberg cooperative arrangements with foreign producers has become a survival strategy for many firms (Textil-Wirtschaft 18.11.1993).

Similar tendencies have been observed in the "Third Italy", where a growing number of firms are moving production and distribution facilities to low-wage countries in Asia and Eastern Europe. In the textile and apparel districts, for example, the current perception expressed by trade association officials is that relocating production and other activities beyond district boundaries has become a matter of commercial survival for all actors involved (Textil-Wirtschaft, 21.10.1993). Commentators on these developments note the apparent increase in competitive rivalry, at the expense of district-type cooperation. "The 'every man for himself' mentality has led to a battle of all against all, without coordination and without the support of governmental policy" (Textil-Wirtschaft, 21.10.1993, p. 74). As a consequence of intensified competition business populations have been contracting and employment levels have been declining. For example, in the Prato district

(Emilia-Romagna), long a center of textile production in Italy, the number of firms fell from about 17,000 to 11,000 between 1985 and 1993 (Textil-Wirtschaft, 23.6.1994), and many of the survivors are relying more on foreign production (Textil-Wirtschaft, 10.3.1994).

The knitwear and clothing district of Carpi (Emilia-Romagna) has seen a similar development in recent years. The number of firms fell by 20 percent between 1981 and 1991, while employment growth came to a halt, for the first time since 1950 (Bigarelli and Crestanello 1994). The closures affected mostly the smallest firms. Many of the surviving businesses have intensified their subcontracting relations with firms outside the district, with the largest firms decentralizing abroad, so that in 1988 about two-thirds of the entire industry workforce were employed outside the region. The primary reason given for externalizing production outside the region is the intention to save on costs by outsourcing to areas where labor costs are lower. As a result, "inter-firm relations inside the area have weakened" (Bigarelli and Crestanello 1994, p. 139).[2]

These developments suggest that the strategic use of business networking requires a global perspective, contrary to the demands of locally embedded industrial districts. As the CEO of Mercedes-Benz in Baden-Württemberg emphasized, "if there is anything positive we have learnt from our performance last year [1993], it is the fact that we depend on the globalization of our activities not only for cost and industry structural reasons, but also because we need to spread risks" (Handelsblatt, 27.1.1994). For this company, and we suspect for others as well, in highly competitive markets cooperative relations with other firms, both within and outside a district, are probably informed more by economic calculus than social considerations or historical habit. Commenting on relations with foreign partners, the Mercedes-Benz executive noted that "everyone talks with everyone else, because we are all forced to seek scale economies and to enhance our internal flexibility" (Handelsblatt, 27.1.1994). If many of the small and medium-sized enterprises in Baden-Württemberg do not follow their larger competitors abroad, it is not necessarily out of a sense of social obligation to their region, as the district model would have it, but because they cannot afford the financial costs of moving their business (Handelsblatt, 6.4.1994).

In sum, the alleged return to regionalized production complexes is in direct conflict with globalization pressures. The strategies of international companies have made territorial boundaries increasingly insignificant and have eroded the capacity of

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[2] One of the reasons for this dramatic increase in business failure rates in the Italian textile and apparel sector lies in the build-up of overcapacities during the 1980s. According to some observers, many firms pursued their investment strategies independently and without even consulting their industry associations (Textil-Wirtschaft, 7.10.1993). Such behavior is, of course, quite inconsistent with the district model's emphasis on business collaboration and the joint use of collective services. Also, the build-up of excess capacities in this sector is not unique to districts, but is common to most of the industries and regions in the developed economies (Jensen 1993).

governments to manage regional and even national economies (Held and McGrew 1993). To many observers "national champion" corporations have become global webs with no particular national affiliation (Reich 1991), even if they are thought to have a "home" base. As Amin and Robins (1990, p. 28) stated, "In the 20th century, the local economy can only be seen as a node within a global economic network; and it can have no meaningful existence outside this context. If we consider that this global arena is shaped and informed by formidable relations of power, then the scope for local autonomy and proactivity becomes considerably narrow." One might then ask whether it is not premature to write off large firms and their ability to survive as highly integrated producers, as many "flexible specialization" and district theorists have done.[3] Since large and globally active firms are in a strategic position to play off particular local networks, the viability of districts and the employment stability of the workforce depends to an important degree on the willingness of the large corporate players to source locally and to support the local institutional infrastructure. As we noted above, recent developments in world markets have put pressure also on smaller firms to build relations outside the district, thus weakening interfirm relations within a given region. There are thus tensions and contradictions inherent in the spatial concentration of industrial districts and the growing international orientation of many businesses. The recent experience of districts suggests that these contradictions are not always resolved in a manner consistent with the district model. Globally oriented corporations are not likely to let the particularistic needs of regions override international imperatives (Streeck 1991).

3.2 Corporate Flexibility versus Employment Security

The employment regimes in industrial districts are often seen as an example of the type of arrangements required in the new economy (Best 1990). One of the basic characteristics of such arrangements is flexibility in the production system, in organizational design, and in employment relations and labor market organizations. The literature has discussed a number of business strategies for labor market flexibility: numerical, functional, financial, and temporal flexibilities (Atkinson 1984; Storper and Scott 1990). Numerical flexibility refers to the ability of a firm to respond to changes in demand and output by altering the volume of labor inputs. Functional flexibility involves the broadening of tasks performed and skills deployed by employees. Financial flexibility means moving away from a strictly time-based pay system to a productivity or performance-based pay system. Temporal flexibility concerns the distribution of working time, including the use of casual and temporary employees.

The literature on Italian districts suggests that firms make extensive use of labor market flexibility and that such flexibility is a competitive advantage of districts. In

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[3] Even Piore and Sabel (1984) admitted that the particular collective bargaining structure in Germany permits large corporations opportunities for flexible specialization without the vertical disintegration characteristic of industrial districts.

engineering firms, for example, skilled male machinists, fitters and technicians need to perform both manual and conceptual tasks - a case of functional flexibility. An extensive use of family workers by firms and a lack of restrictions on hiring and firing in small artisan firms facilitate both numerical and temporal flexibilities (Murray 1987). Since firms in industrial districts are predicated on flexibility, one would expect that they will make extensive use of flexible employment arrangements, as reflected, for example, in the proportion of peripheral and part-time workers. Unfortunately, systematic and comparative data on flexible employment strategies are not available at the enterprise level, to test this expectation, and at the regional level data are available only for part-time employment and for select years.

Table 1: Regional Comparisons of Part-Time Employment Rates (as % of Total Employment)

Region	1973			1979			1990
	female	male	all	female	male	all	all
Germany	20,0	1,0	7,7	24,2	1,0	9,5	15,2
Baden-Württ.	21,1	1,2	8,6	25,5	1,0	10,5	15,6
Stuttgart	19,9	0,8	7,8	27,1	0,8	10,8	15,3
Italy	8,5	2,3	3,9	6,0	1,2	2,6	4,9
Emilia-Romagna	12,8	2,9	5,9	7,4	1,5	3,5	5,5
Veneto	7,3	2,3	3,6	6,6	1,3	2,9	4,9
Tuscany	8,6	2,1	3,7	5,3	1,0	2,3	6,6

Source: Eurostat, 1975, 1981, 1993.

Table 1 shows part-time employment rates in Baden-Württemberg, the state's capital region Stuttgart, and the three most widely cited Italian industrial districts, Emilia-Romagna, Veneto, and Tuscany (which themselves contain smaller and more specialized districts). In most of the three years shown, the part-time employment rate was generally higher in the districts than the national averages. The differences, however, are not large enough to suggest that industrial districts are unique in that respect.[4] Also, part-time employment rates were higher in 1990 than in the 1970s, in both countries and all regions. This seems to indicate that numerical flexibility, defined this way, is not just confined to industrial districts, but is becoming an important aspect of labor market strategy everywhere (Blyton and Morris 1991). The demand for corporate flexibility in terms of using labor as a variable factor of production has increased, and in that respect the employment regime of industrial districts is not unique.

[4] Certainly, three observation years give a very selective picture of relationships, and hide the effects of business cycle and institutional developments. For our argument, however, the main comparisons are between district and national rates, and not across countries or over time.

The most recent collective agreements in Germany, as in Italy and elsewhere (Hyman 1994), reveal a clear trend toward more differentiated approaches to worktime flexibility. Contracts continue to be written at the sectoral level, but they are increasingly taking on a more general framework character, leaving considerable room for interpretation and application at the enterprise and even plant level (Handelsblatt, 7.3.1994; Daniels and Lamparter 1994). For example, the length of the workday and workweek may now vary considerably over the course of the year, depending on market conditions. Despite the greater flexibility of sectoral agreements, the incidence of firms deviating from such contracts has been on the increase, without necessarily causing labor resistance (Handelsblatt, 31.1.1994).

Even if the emphasis on workforce flexibility were limited to industrial districts, the implications for labor are probably not as benign as the district model tends to imply. There may be a reasonable degree of employment security for full-time, core employees, but this security is largely bought at the expense of a volatile peripheral workforce. Part-time employees and contract workers are often not entitled to the same benefits that full-time employees receive, unionization rates are usually much lower, and protective labor legislation tends to be substandard for such workers (Hinrichs 1989). As a result, there is little or no employment security for peripheral employees, as firms use contingent workers as a buffer to absorb fluctuations in demand (Pfeffer 1994).

Industrial districts in both the "Third Italy" and Baden-Württemberg have a strong craft-artisan tradition, which is often assumed to be an important foundation for current economic success (Ricoveri et al. 1991; Medick 1993). From the district perspective, a strong artisan tradition leads not only to a commitment to skill building and innovativeness, but is part of the social "glue" that holds the production complex together in times of stress. To some observers, artisan traditions help explain the absence of labor unions and labor strife in Italian districts, but there is also a downside to artisanship. In Italy, artisan shops employing fewer than 23 in-house employees were exempt, after 1970, from labor and social security laws, while in the engineering sectors the exemption applied to firms with fewer than 15 workers. In 1987, the threshold for legislative protection against dismissal was reduced to cover employees in firms with at least 8 workers, but this still leaves out a substantial proportion of the workforce in Italian districts. Also, the degree of unionization in the "Third Italy" is lower in some sectors than Piore and Sabel (1984) claimed [see Murray (1987) for the data]. Recent surveys also report a general lowering of labor standards, the intensification of work effort, and, as in Germany, the decentralization of bargaining to the enterprise or branch level (Amin 1989; Perulli 1990). It would appear that competition from small and lower paying firms in Italian districts has forced unions into a reactive position. In Baden-Württemberg, and elsewhere in Germany, the situation is somewhat different, at least formally. But, as noted above, even there pressures on unions to concede have been mounting in recent years. These developments are inconsistent with the district model's emphasis on strong and supportive labor unions.

Internal, or functional, flexibility requires workers' willingness to learn and apply broad skills, to use their creative powers, and to exercise self-discipline (Gertler 1993). Attaining the objectives of flexible networks (customizing products to small market segments, quality improvement, technological upgrading of the production process, and so on) requires a workplace organization that promotes the empowerment of workers. As research on the positive influence of unionization on workplace productivity in the United States has shown (Freeman and Medoff 1984; Katz et al. 1985), this can best be achieved in the presence of strong and responsible labor unions, works councils, or other forms of interest representation. But the recent experience of many industrial districts has been a general erosion, rather than strengthening, of union power.

While internal flexibility requires the ability of firms to assign workers to variable tasks, external flexibility requires labor mobility across firms. The argument, from a district perspective, is that workers are more likely to be mobile and invest in their human capital if their employment security within the district is guaranteed. Likewise, employers are more likely to invest in labor training if the institutional structure of the district supports stability and a long term commitment between all employers and workers. This condition is more likely to be met in a unionized setting, where institutional mechanisms for promoting employment security within the district are in place. It seems obvious that, unless unions have sufficient bargaining power and are willing to pursue intra-district solidarity strategies on wages and working conditions, "flexible specialization" in business networks can easily degenerate into a competitive game of worker exploitation.

A functional requirement of labor market flexibility in districts is that labor interests are well represented at the district level, and not only at the national, sectoral, or enterprise level. That is, the structure of interest representation in districts needs to mirror the industrial organization of production. That unions are organized accordingly and play a strong role in the shaping of networks in industrial districts is far from clear. In Italian districts, it is usually local governments and political parties that coordinate interests (Streeck, 1991). In Baden-Württemberg, as elsewhere, regional interest representation is subject to global pressures, as reflected in union demands for European works councils and transnational social legislation. Even within Baden-Württemberg, it is not clear that unions have played the kind of role in state and local governments' innovation policies that would meet the theoretical premises of the district model (Schmitz, 1992). Unions are often excluded from official positions on advisory councils and have limited access to informal networks. Even in small and medium-size firms with works councils, the representation of labor interests is rarely as effective as is intended by legislation (Wassermann 1990). "The consequence, of course, is that such groups participate in the system without participating directly in the process of collective self-definition" (Herrigel 1993, p. 233).

Thus, to the extent that industrial districts evolve on the terms of capital - to maximize organizational flexibility - the role of labor is relegated to that of a reactive

recipient of initiatives and policy programs, rather than an active participant in shaping employment regimes. This outcome contradicts the assumption of effective labor participation in industrial districts, a basic tenet of the district model.

3.3 Risk Taking versus Risk Sharing

While large, multinational firms can survive on the basis of limited risk-taking, small businesses with limited resources tend to avoid risk-taking activities. Because most small firms cannot produce all the components of broad product portfolios, they are unable to be at the forefront of product development and fast-changing technologies, and to gain access to diverse markets. For this reason alone, small businesses find it useful to participate in a network of firms with which they share the risks of operating in diverse and dynamic markets, as long as they retain their self-sufficiency.

According to the district model, small firms compete on the basis of product quality and flexibility. This requires continuous research and development as well as training employees for skill development. Because of limited resources and a tendency to avoid risk-taking, a small firm will not be able to undertake these activities as effectively as larger companies. However, through the development of joint research centers, vocational and technical training institutions, and district level strategic planning mechanisms, the risks associated with such activities can be shared among network firms, local governments, and other service providers. In Italy's Modena district (in Emilia-Romagna), for example, local governments and small artisan firms have created a technological infrastructure and provided for joint vocational training (Perulli 1990). In the Carpi district, clothing firms have access to a variety of research centers and data banks (Bigarelli and Crestanello 1994). In Baden-Württemberg, the machine tool and textile industries can rely on a myriad of quasi-public intermediary institutions for technology transfer and labor training (Schmitz 1992; Herrigel 1993). Nevertheless, even among cooperating firms risk sharing often turns into risk shifting, especially from large to small firms, and from central districts to peripheral districts.

To a large extent the employment security or stability that is possible within a district depends on the ability to delegate the risks of adjustment to variable conditions to peripheral firms in the district or in adjacent regions. Experience shows that larger firms tend to diffuse the cost of adjustment during economic downturns throughout the system, turning the smaller firms in the district into "shock absorbers." In the Carpi clothing district, for example, recent changes in the organization of production have added flexibility to the production schedule, but the costs of this flexibility are borne mostly by the increasing number of highly specialized and small firms that produce "just in time" and that do not operate throughout the year. About a third of the total production in the Carpi district is of a "just in time" type, while much of the scheduled and more predictable part of production is subcontracted to firms located outside the region (Bigarelli and Crestanello 1994). In the Zolleralb knitwear district in Baden-Württemberg, large producers benefit from subcontracting

relations with very small firms that close operations "on demand." The number of such dependent businesses has been growing in recent years (Textil-Wirtschaft 18.11.1993).

For larger firms, strategic networking through subcontracting to small suppliers enhances their own flexibility while passing the associated risks to smaller firms. Benetton, for example, has extensive subcontracting relations with small firms (Taplin 1989, p. 11), and at least one study suggests that this company dominates the production chain and pressures subcontractors to work exclusively for it (Belussi 1987). To the extent that the larger company can instrumentalize market demands to pressure its suppliers into "passive pliability" (Semlinger 1993, p. 170), the much-celebrated "partnership" in industrial districts ends up being one-sided. Supplier firms in the German automobile industry recently formed an association, to defend their interests against the pressures exerted by automobile manufacturers. The head of this association complained about the contradiction between the demands of cooperative interfirm relations, commonly couched in terms of "partnership", and the growing insistence of large-scale producers on contracts that may be cancelled on short notice (Handelsblatt, 13.4.1994).[5] To survive under such conditions, small firms often resort to labor externalization strategies, by terminating their own peripheral workers or by replacing core workers with more easily expendable temporary workers. By doing so these small firms risk losing the very advantage they have over large companies, namely a highly skilled and committed workforce that can be employed in variable settings (Semlinger 1993).

We suspect that the pressures of external market competition, to which businesses in industrial districts are not immune, drive firms into strategic behavior that is more informed by efficiency considerations than the kind of social obligations that characterize ideal-typical districts. The outcome is that market opportunities must be "exploited", just to remain competitive, and that forming alliances with firms outside the district become a viable least-cost alternative to commitment to network relations within the district. Above we noted the tendency in recent years of firms in the "Third Italy" and Baden-Württemberg to move production facilities to low-wage countries. Research on Italian districts has also shown that family enterprises can be an important source of business flexibility, enabling small firms to accept pressures from larger companies in the networks. Family-owned businesses - mostly small ones - account for some 99 percent of Italy's companies (The Economist 1994) and are especially widespread in Italian districts. Recoveri et al. (1991) found that in such businesses the younger members of a family are often forced to accept poorly-paid jobs and that many women accept long working hours and casual employment contracts. Sengenberger and Pyke (1991) noted that in many districts families, and the networks in which they are embedded, are an important means of employment

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[5] In contradiction to the model of interfirm cooperation in districts, the complaint is made that confidential design blueprints are often passed on to competitors, without the supplier's permission (Handelsblatt, 26.4.1994).

security in difficult economic times, but the wage levels and long hours they accept can hardly be said to fulfill the promise of the district model.

In short, to the extent that network relations in industrial districts are not symmetric, risk sharing can turn into risk shifting from dominant firms to the smallest, most vulnerable firms. In this case, it is the peripheral employee who pays for the cost of economic adjustment required of those firms. Put differently, the cost of surviving in competitive markets is being shifted to communities and to employees in the periphery of the industrial district. Even embedding has its contradictions. This raises the question whether business efficiency in industrial districts is at the expense of employee equity.

3.4 Business Efficiency versus Employment Equity

Under normal circumstances, efficiency is an important goal of business, while equity is important to many employees, but these goals are not necessarily incompatible if properly implemented. There is a growing recognition among organization and labor relations theorists that business survival in a highly competitive marketplace demands the adoption of human resource management strategies that treat the workforce as a competitive advantage, and not as a cost to be minimized or avoided. Pfeffer (1994), for example, describes a number of human resource management practices (selective recruiting, high wage policy, information sharing, and so on) that are aimed at building sustainable and difficult-to-imitate competitive advantages. What they have in common is that they entail considerable involvement and responsibility on the part of the work force. While participative human resource strategies are useful in a variety of situations, they are an essential characteristic of management-labor relations in industrial districts, premised on notions of trust, employee empowerment, and teamwork. In that sense, industrial districts are "worker friendly" by definition, but the reality does not always conform to ideal-typical characterizations.

The promise of worker emancipation in industrial districts raises the idea of employment equity as a broad social objective. The intention is to avoid labor market segregation along racial, gender and skill lines, and to prevent the marginalization of certain employee groups. The evidence, however, suggests that either there continues to exist significant labor market segmentation in districts or recent changes in the marketplace have forced a return to earlier (i.e. Fordist) forms of industrial capitalism. We already noted the heavy use of underpaid family labor in Italian districts, but labor markets are also segregated by gender. The knitwear workforce in the Carpi region, for example, shows a high degree of segmentation along gender lines, with women disproportionately working in production or at home (not necessarily involuntarily), and men working as better-paid artisans (Solinas 1982). The picture is similar in other industries in the Third Italy. Murray (1987) reports that only a fifth of engineering employees are women, and that 96 percent of them work in the three lowest skill grades, while 66 percent of male engineering workers are in the three highest grades. The organization of production in the "Third Italy" has

promoted significant labor market segregation in that "quality craft work is done by Emilian men, semi-skilled assembly work by women, and heavy foundry and forging work by Southern Italian and North African workers" (Murray 1987, p. 88). Studies have shown extensive secondary labor markets even in high-technology sectors, such as in Southern California (Scott 1992), Silicon Valley (Florida and Kenney 1990), and Cambridge (Crang and Martin 1991).

In the Italian small firm sector in general, industrial relations and working conditions vary widely due to the absence of unions and protective labor legislation. The homeworking sector is, of course, even less well protected. In the larger firms there may be wide skill differences, but their relatively high degree of unionization prevents wide wage differentials. Since 1970, employees in Italy have had the right to union representation at the workplace, called Rappresentanze Sindacali Unitarie, who play a role similar to that of a Vertrauensmann in Germany. New legislative developments provide that two-thirds of the representatives on this body are directly elected by the workers and the rest are selected from the list of candidates presented by the trade unions signing the national sectoral collective agreement (European Industrial Relations Review 1994a). However, work units with less than 15 employees do not come under the jurisdiction of this Act. This leaves out about a third of the employed workforce, including the majority of those employed in Italian industrial districts (Pellegrini 1993, p. 145). Recently negotiated "solidarity contracts" in Italy, providing for reductions in pay and working time, are available only in large companies and are seen by some observers as further evidence of an increasingly segmented labor market. Workers in small businesses can rely only on unemployment benefits, which stand at 27 percent of previous pay and which are available for only six months (European Industrial Relations Review 1994b).

The relatively high rate of unionization in Baden-Württemberg, coupled with the right to works councils in enterprises with more than five employees, tends to limit the kind of exploitation of women and minorities that is typical in many other regions. Recent developments in business populations, however, suggest increased tendencies toward labor market segmentation there as well. The Stuttgart region, for example, saw a real decline in the number of establishments in the mid-1980s (Audretsch and Fritsch 1992). The fact that the rate at which new businesses are established in this region has been below the average for all other regions in West Germany may suggest a process of resource deconcentration, encouraging the polarization of the labor force. Consistent with this argument is the finding that in the Stuttgart region the rate of business foundings in the service sector has exceeded that in manufacturing. Because new firms in the service sector tend to be small and heterogeneous with respect to employment outcomes (e.g., wage levels, working hours, employment security), there is the possibility that employment opportunities in this region are becoming more, rather than less, segregated.

The recent experience in Italian districts is similar to that in Baden-Württemberg (Fumagalli and Mussati 1993), with respect to business founding rates. Firm birth rates have declined in the manufacturing sector - in stark contrast to the rates

observed in the 1970s - while growing slightly in services. Fumagalli and Mussati (1993) note that most of the new firms are marginal businesses operating in industries with low scale economies and barriers to entry, or they are small subcontractors dependent on the investment strategies of large corporations. The profit performance of the small firm sector in these districts deteriorated throughout the 1980s, in marked contrast to their performance in the 1970s when the district model became first popularized. The picture of Italian districts that emerges is anything but comforting, from a district theoretic perspective. "The idea of a flexible system of production as a new form of labour organization and economic strategies (with all the implications of public policy) is strongly declining and, if the small firms are relatively profitable, this seems to reflect the prevalence of low wages and poor working conditions, rather than superior economic dynamism" (Fumagalli and Mussati 1993, p. 32).

Consistent with this conclusion, unemployment rates of males and females in industrial districts show no evidence of employment equity,[6] defined as such. The data in Table 2 indicate that, while unemployment rates for both genders in Baden-Württemberg, the Stuttgart region, and the Italian districts have been below the rates at the national level, rates for females have consistently exceeded those of males. Also, female and male unemployment rates have widened since 1973, in all regions considered in Table 2. The data in Table 1 show that in all regions women are far more likely to be employed part-time than men, suggesting that employment opportunities for women are as restricted in industrial districts as elsewhere.

Table 2: Regional Comparisons of Unemployment Rates (as % of Total Employment)

Region	1973			1979			1991		
	female	male	all	female	male	all	female	male	all
Germany	0,8	0,4	0,5	3,5	1,8	2,7	5,0	3,7	4,2
Baden-Württ.	0,6	0,2	0,4	2,4	1,1	1,6	3,1	2,0	2,4
Stuttgart	0,5	0,2	0,3	2,1	0,9	1,4	2,7	1,7	2,1
Italy	6,1	3,3	4,0	8,6	3,8	5,3	15,8	6,8	10,2
Emilia-Rom.	7,1	1,8	3,5	7,5	1,6	3,6	7,7	1,9	4,3
Veneto	3,9	2,1	2,5	6,2	2,3	3,5	6,6	2,5	4,1
Tuscany	4,6	1,6	2,4	6,6	2,2	3,6	12,9	4,2	7,6

Source: Eurostat, 1975, 1981, 1993.

[6] Industrial districts in Jutland, Denmark, may well be an interesting exception, where at least one study has shown high rates of unionization and high wage rates throughout the districts (Hansen 1991). This study, however, like many others, may suffer from a selection bias in the sample, as only existing firms were surveyed, and thus information on workers displaced from failed firms was missed. For purposes of understanding employment outcomes it is particularly important that researchers survey complete business populations, including failed firms (Staber and Aldrich 1989).

Given the available evidence, the promise of industrial districts fostering employment equity and an equal distribution of economic opportunities appears somewhat hollow. The familiar tension between the need of management to control the labor process and to promote worker initiative and commitment (Hyman 1994) is as pressing in industrial districts as elsewhere. To the extent that interfirm relations within and across districts derive their flexibility from the existence of secondary labor markets, where employment is precarious and marginal, such districts do not live up to their reputation as a craft and worker "utopia". In many districts, as elsewhere, the economic reality is that businesses tend to pursue traditional cost-minimization strategies to survive in a competitive market environment. This is particularly true in the much acclaimed Italian districts where horizontal competition among firms is becoming fierce and vertical cooperation weak (Fumagalli and Mussati 1993). One may wonder about the conditions under which the social fabric of industrial districts is strong enough to withstand the onslaught of distant and impersonal economic forces.

4. Concluding Remarks: Possibilities for Public Policy?

The idea of industrial district has attracted the interest of people concerned with business and labor flexibility, and has been hailed as a model for regional economic renewal. While the model has a number of attractive features, we identified several tensions and contradictions with negative outcomes for labor and employment. Our analysis focused on the reality of industrial districts in Italy and Baden-Württemberg and noted some broad similarities.

However, there are also some differences between the two regions which need to be kept in mind, as they may have implications for the structure and dynamics of employment regimes. First, the regions differ with respect to the size distribution of firms. Italian districts have a greater proportion of very small firms than Baden-Württemberg. The average employment size of business units in the industrial districts of Italy is 8 workers, whereas in Baden-Württemberg only about 15 percent of the industrial workforce is accounted for by firms employing fewer than 100 workers. Differences in firm size explain partly why the degree of union penetration is higher in Baden-Württemberg than in the Italian districts. Second, the extent of self-employment is much higher in Italian districts than in Baden-Württemberg. Only about five percent of industrial workers are self-employed in Baden-Württemberg as compared to about 15 percent in the Emilia-Romagna region in Italy. A high rate of self-employment is generally indicative of significant labor force polarization (Bögenhold and Staber 1991). Finally, if one makes a distinction between labor-intensive flexible specialization and technology-intensive flexible specialization (Storper and Scott 1990), then a majority of businesses in Italian industrial districts fall in the former category and more of the business units in Baden-Württemberg in the latter. This distinction is important because labor-intensive flexible specialization is related to employment instability and low wages, whereas the technology-intensive

flexible specialization is more conducive to employment stability, acquisition of firm-specific skills, and higher wage levels.

If there is one observation that is common to most studies of industrial districts it is that they represent unique and historically sedimented structures. Each district has undergone its own specific development, rooted in local culture and tradition (Curry 1993; for a sample of regional studies, see Zeitlin 1989, and Pyke and Sengenberger 1992). The "Third Italy", for example, comprises a number of distinct regions with specific subcultures, political traditions, and institutional arrangements that include interest groups, political parties, welfare structures, business services, and so on (Triglia 1986). Even more dramatic are the observed differences across industrial districts when the national context of economic and policy regimes is considered, indicating variations in factors such as firm size distribution, the extent of business integration in global networks, and the level of government expenditures in critical industries. Localized cultures are important forces shaping the regional economy via business norms, worker habits, and even linguistic dialects (Scott and Storper 1992). But equally important are the institutional-regulatory regimes at the national level which constrain possibilities for regional economic development (Saxenian 1989).

Despite the existence of significant differences in the properties, origins, and evolutionary dynamics of contemporary industrial districts, there is a tendency among practitioners in business and government to search for generic elements of districts that can be replicated. Public policy discussions in particular often proceed on the assumption that there is a model of districts that can be transferred or adapted to other regional contexts. This approach is understandable, but it is fundamentally flawed for a number of reasons.

First, it is not clear what these generic properties of successful districts are. For example, accounts of collaboration make much of the role of trust between interacting enterprises and between employers and workers, but it is not clear what the important sources of trust are and to what extent trust-building can be engineered. As Zeitlin (1992, pp. 286-287) noted, "under the right circumstances, it would appear, almost any set of common experiences can form the basis of a common culture." To date, however, no comparative studies have been attempted with the express purpose of identifying those conditions and how they can be created.

Second, even if generic properties could be identified, it is not self-evident that it is these properties that account for the observed economic success of districts. If, for example, trust and consensus-based political cultures are so important and exist in many regions, then why have they not led to similar economic performance outcomes in all regions? Without doubt, other variables are at play as well, including luck, error, and chance. As Schmitz (1992) noted, the economic success of Baden-Württemberg during the 1980s may have much to do with the fact that the economy

is dominated by a few industries (electronics, motor vehicles, and machine tools) that did particularly well at that time in key export markets.[7]

Social consensus is not a static phenomenon, but evolves with changing circumstances. The evidence suggests a resurgence of individualism in some Italian districts, where collective bonds are thought to be particularly strong and enduring, as small firms struggle to survive the onslaught of Asian competition (The Economist 1994). Recent interview studies revealed a growing scepticism among business owners and service providers about the benefits of small firm networks, arguing that "a model centred on small and medium-sized family firms with an extensive local social division of labour is no longer viable. Instead, there is a need for financial centralization and greater vertical integration" (Dunford et al. 1993, p. 136). Whether the push for corporate re-integration has benign consequences for employment relations depends partly on the organization of labor interests. In the German case, at least, the territorial jurisdiction of the leading industrial unions is so broadly defined that diverse supplier and subcontractor relations - typical of industrial districts - can often be covered by a single union, without inter-union competition and notwithstanding the ability of works councils to strike special deals at the plant level (Streeck 1991).

A third reason for being sceptical about the ability of interventionist strategies to replicate successful industrial districts stems from the emergent nature of districts. Historical accounts of contemporary districts emphasize the evolutionary development of institutional arrangements, but also note that evolution is not always uni-directional and without friction. Although it can be argued that the relative success of the Baden-Württemberg economy in the 1970s and 1980s was in part rooted in strong artisan traditions of the nineteenth century, the development of artisanship in that region was highly uneven and not the result of a consistent public policy (Sedatis 1979). In Emilia-Romagna, it has taken the small firm sector three to four decades to reach a stage where one can reasonably speak of economic success (Murray 1987). Policy initiatives to create district arrangements are likely to fail, if they ignore the evolutionary character of social relations.

Finally, even if interventionist strategies were able to replicate and create industrial districts, political assignments of special status to places may lead to a "bandwagon effect", as Glasmeier (1988) demonstrated for the Japanese Technopolis program. Assigning special status to particular regions may create political pressure and lead to unproductive competition among governmental jurisdictions for limited resources. The end-effect would be that none or only the politically most powerful regions are able to attract the critical mass of resources necessary for obtaining the promised synergies of industrial districts. It can hardly be in the interest of labor

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[7] The growth rate of Baden-Württemberg's economic output has been below that of the rest of West Germany since 1990, and in 1993 the region's economy contracted more dramatically than any other German state, despite a continued consensus orientation (Frenkel 1994).

unions to support employment creation strategies that are driven by such inter-regional competition (Adamy and Bosch 1986).

In conclusion, how the various tensions and contradictions that have been identified in this paper will be resolved empirically remains an open question. As our analysis has shown, there is some doubt that the empirical realities of industrial districts support theoretical expectations. Employment opportunities are not always balanced, interfirm cooperation does not necessarily lead to employment and wage security, and the needs of endogenous local development tend to be overwhelmed by global competitive forces. It may well be that the pure district model, based on the assumption of social embedding, is sustainable only in culturally homogeneous and protected locales, but this would severely limit its utility as a model for economic renewal. In any case, there is considerable room for detailed and comparative research to study the limitations of the industrial district model for regional economic development. The challenge will be to look beyond the ideological shrouds of the "district fetish."

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